

## M.O.E. Policy Manual

POLICY TITLE

POLICY TO GOVERN THE PROVISION AND OPERATION OF PHOSPHORUS REMOVAL FACILITIES AT MUNICIPAL, INSTITUTIONAL AND PRIVATE SEWAGE TREATMENT WORKS

NO 08-04-01

Legislative Authority

Ontario Water Resources Act (Sections 17 and 24 - R.S.O. 1980)

#### Statement of Principles

This policy describes the requirements for the provision and operation of phosphorus removal facilities.

Except where exempted by the Policy, the provisions are to apply to all municipal, institutional and private sewage treatment works discharging to surface waters and requiring MOE approval under Section 24 of the OWR Act, RSO 1980.

The guidelines referred to in this policy are available from the Water Resources Branch.

1. Reason for Phosphorus Removal

The Ministry requires that phosphorus removal facilities be installed and operated at certain sewage treatment works to minimize water quality and associated eutrophication problems caused by excessive phosphorus levels in receiving waters.

Point of Contact

Director, Water Resources Branch

**Effective Date** 

MOF 1428

## 2. Basin Requirements

2.1 Lake Erie

All municipal and institutional sewage treatment works regardless of capacity, discharging into the Lake Erie Basin, require phosphorus removal to the 1.0 mg/L total phosphorus level in the effluent.

2.2 Lake Superior Lake
Huron Lake Ontario
- St. Lawrence
River Basins

All municipal and institutional sewage treatment works having nominal design capacities of 4546 m y3/d (1.0 mIgd), or more, having effluent discharges to the Lake Ontario Basin, Lake Huron Basin, and the International Section of the St. Lawrence River Basin, require phosphorus removal to the 1.0 mg/L total phosphorus level in the effluent.

For discharges outside the International Section of the St. Lawrence River, the phosphorus removal requirement of 1.0 mg/L also applies to facilities 1.0 mIgd or larger.

## 2.3 Ottawa River Basin

All municipal and institutional sewage treatment works having nominal design capacities of 4546 m³/d (1.0 mIgd), or more and having effluent discharges to designated portions of the Ottawa River Basin, (as defined in "Summary Report on the Phosphorus Removal Program, April 1976") require phosphorus removal to the 1.0 mg/L total phosphorus level in the effluent.

# 3. Recreational Waterways Requirements

All municipal and institutional sewage treatment works regardless of capacity, having effluent discharges to Recreational Waterways, such as but not restricted to, the Trent-Severn River System (including the Lake Simcoe Drainage Basin and the Bay of Quinte Drainage Basin), the Rideau River System, the Lake Nipissing Drainage Basin, and selected areas of the Lake Huron (Georgian Bay) Drainage Basin, require phosphorus removal to the level corresponding to that required by the major drainage basin as stated in Items 2.1 to 2.3, above.

4. More Stringent Requirements

Phosphorus removal requirements more stringent, either in terms of effluent level or design capacity to which they apply, than those outlined in Items 2 to 3 above, may be imposed, but only when justified by appropriate site-specific receiving water assessments and basin-wide considerations.

5. Phosphorus Removal
Based Upon Water
Assessment Studies

Phosphorus removal requirements for municipal and institutional sewage treatment works discharging to watercourses not included in the above Items 2 to 3 and for private communal sewage treatment works will be determined through receiving water assessments, as the need arises.

6. Compliance Assessment

Sampling and analysis requirements to assess effluent compliance will be in accordance with the requirements set out in MOE Policy 08-06, "Policy to Govern Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works".

7. Guidelines

For assistance in implementing this policy, reference should be made to Appendix A, Guidelines for the Determination of Phosphorus Removal Requirements for Municipal, Institutional and Private Sewage Treatment Works.

8. <u>Deviation from Policy</u> and Guidelines

Any deviation or relaxation from the policies listed in sections 1.0-7.0 above and the related Guidelines must receive the concurrence of the Director, Water Resources Branch.